

United States Department of the Interior
Record of Compliance for a Rulemaking Document

Title of rule: Preble's Meadow Jumping Mouse ESA Section 4(d)	RIN: 1018-AF30
Sponsoring bureau/office: Fish and Wildlife Service, Region 6, Denver, Colorado	
Contact name/phone number: Lee Carlson (303) 275-2370	

This Record of Compliance (ROC) certifies that this rulemaking action complies with the various statutory, Executive Order, and Department Manual requirements applicable to rulemaking. Some of the statutory requirements are judicially reviewable. The ROC also provides a brief rationale for the various certifications.

A. Need for this regulation.

1. Why we are publishing this rule.

This special rule is intended to prescribe the species-specific conditions under which take of the Preble's Meadow Jumping Mouse (Preble's) would or would not be a violation of section 9 of the Endangered Species Act (ESA). The Preble's was designated as a threatened species on May 12, 1998. All of the section 9 prohibitions of the ESA against take of the species are applicable across the whole Preble's range. The special rule will exempt four types of activities from the take prohibitions. **With** the rule, the exemptions provide affected land owners with economic benefits by allowing activities on their land that, **without** the rule, may have been prohibited or limited by section 9. The rule will be in effect for 36 months, a period long enough to develop Habitat Conservation Plans to obtain authorization for take of the Preble's under section 10 of the ESA.

2. Why alternative approaches are not feasible.

A special rule is the only mechanism by which the Service can identify species-specific, rangewide take prohibitions and exceptions for a threatened species. Without this special rule, anyone undertaking activities that may result in take of the Preble's would be required to obtain an incidental take permit under section 10(a) or incidental take statement under section 7(a)(2) of the ESA. This would incur an economic cost, would take time, and in the case of the 7(a)(2) incidental take statement, would require a linkage to a Federal action.

3. Authority under which this rule will be published.

This rule will be published under the authority of the Endangered Species Act, Section 4(d), 16 U.S.C. sections 1531 to 1544.

(B) Determinations and certifications.

- 1. Regulatory Planning and Review.** In accordance with the criteria in Executive Order 12866, the Service believes that this rule is not a significant regulatory action.

(a) *This rule reduces the regulatory burden of the listing of the Preble's, because it provides exemptions to the take prohibitions of section 9 of the ESA that currently apply throughout the range of the Preble's.*

The exemptions to the take prohibitions of the ESA provided by this rule will reduce economic costs of the listing. The economic effect of the rule is a benefit to landowners and the economy. Based on the analysis described in the Appendix at the end of this document, the 4(d) rule, by itself, will not have an annual economic impact of more than \$100 million, or significantly affect any economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit and economic analysis is not required.

(b) *This rule will not create inconsistencies with other Federal agencies' actions.*

Other Federal agency actions are mostly unaffected by this proposed rule, with local government taking the lead in actions relating to the Preble's. The Service is encouraged by State and local governments' efforts to develop effective conservation plans for the Preble's.

(c) *This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.*

Because the special rule would allow otherwise prohibited activities to continue, effects of the rule on entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients would be positive.

(d) *This rule will not raise novel legal or policy issues.*

The Service has previously promulgated section 4(d) rules for other threatened species.

- 2. Regulatory Flexibility Act.** To assess the effects of the rule on small entities, we focus on the agricultural sector of the economy because, as discussed in detail in the Appendix, farmers are the entities most likely to be affected by the rule, particularly those engaged in hay production. The following table gives the number and average size of farms in the affected counties.

Table: Number of Farms and Average Farm Size, by County

State/County	Number of Farms	Average Farm Size (acres)
Colorado		
Boulder	276	195
Douglas	209	356
Elbert	363	1,332
El Paso	357	1,019
Jefferson	149	259
Larimer	510	418
Weld	1,698	647
Wyoming		
Albany	171	6,103
Converse	228	7,228
Goshen	467	1,840
Laramie	349	2,810
Platte	314	2,787

Sources: Farm and farm size data from *1997 Census of Agriculture: State Profiles* at <http://www.nass.usda.gov/census97>.

Without specific information about which farms would be affected, we are unable to determine whether any farm's net income would be significantly affected by the rule, or if the number of farms that are so affected constitute a substantial number of the total. However, there is reason to believe that the rule would neither cause significant effects for individual farms, nor affect a substantial proportion of area farms. First, with a few exceptions, the acres of hay production affected by the rule are a small percentage of the county total. Second, the typical area of riverine habitat favored by the Preble's on an individual farm is small compared to the average farm size. We recognize that the owner of a relatively small farm bordering a river could have a significant portion of land affected by the rule, but that situation would clearly be an exception.

Based on the analysis described in the Appendix, we have determined that this rule will not have a significant economic effect on a substantial number of small entities as defined under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). An initial Regulatory Flexibility Analysis is not required. Accordingly, a Small Entity Compliance Guide is not required. This rule reduces the regulatory burden of the listing of the Preble's, because without this rule all take prohibitions of section 9 of the ESA would continue to apply throughout the range of the Preble's. The rule exempts four types of activities- rodent control, ongoing agricultural activities, landscaping, and

activities associated with water rights- from the take prohibitions. This rule allows certain activities to continue, avoiding costs that may be associated with abstaining from conducting these activities in order to avoid take of the Preble's.

3. **Small Business Regulatory Enforcement Fairness Act.** This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule reduces regulatory obligations as discussed in 1 above and, therefore; based on the information included in the Appendix:
 - a. Does not have an annual effect on the economy of \$100 million or more.
 - b. Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions.
 - c. Does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.
4. **Unfunded Mandates Reform Act.** In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501, et seq.), this rule does not impose an unfunded mandate on State, local, or tribal governments or the private sector of more than \$100 million per year. The rule does not have a significant or unique effect on State, local, or tribal governments or the private sector. A statement containing the information required by the Unfunded Mandates Reform Act is not required.
5. **Takings.** In accordance with Executive Order 12630, the rule does not have significant takings implications. As discussed further in the Appendix, this rule reduces the likelihood of potential takings. Therefore, a takings implication assessment is not required.
6. **Federalism.** In accordance with Executive Order 13132, the rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. A Federalism Assessment is not required.
7. **Civil Justice Reform.** In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.
8. **Paperwork Reduction Act.** This regulation does not require information collection from 10 or more parties, and a submission under the Paperwork Reduction Act is not required. An OMB form 83-I is not required.
9. **National Environmental Policy Act.** This rule constitutes a Federal action significantly affecting the quality of the human environment. NEPA analysis will

be conducted prior to publication of the final rule.

- 10. Government-to-Government Relationship with Tribes.** In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951) and 512 DM 2, we have evaluated possible effects on Federally recognized Indian tribes and have determined that there are no effects, because no Indian trust resources occur within the range of this species.

C. Approvals.

I have made each of the certifications/determinations specified above based upon the material in this record of compliance or documents indicated in each section above. I have ensured that this document will be distributed in accordance with Part D, below.

Assistant Director, Ecological Services

Date

Concur:

Director, Fish and Wildlife Service

Date

Assistant Secretary for Fish and Wildlife and Parks

Date

D. Distribution.

Copies of this document must be distributed to:

Office of Regulatory Affairs (ORA)

Office of Policy Analysis (PPA)

Office of Small and Disadvantaged Business Utilization (OSDBU)

Chief Counsel for Advocacy, Small Business Administration (SBA)

Appendix

Economic Analysis of the 4(d) rule Rangewide Exemptions

Activities that result in unauthorized take of the Preble's meadow jumping mouse are prohibited under the ESA. This rule provides exemptions from take prohibitions for certain activities. Currently, costs of avoiding take of Preble's while conducting most of the specific activities exempted under this rule are believed to be minimal. Therefore, while the rule will result in some cost savings, these savings will also be limited. The primary benefit of this rule to landowners and businesspeople is assurance that certain existing activities can continue without causing unauthorized take of the species.

(1) Rodent control. This exemption applies to actions undertaken inside structures or within 10 feet of structures.

Without the rule, those undertaking rodent control in or adjacent to specific habitats within Preble's range may need to have surveys done to determine whether the Preble's is present and whether the potential for unauthorized take exists. If Preble's is present, control of other rodents could still occur; however, methods might need to be modified to avoid take.

With the rule, those undertaking rodent control would not have to be concerned whether they might be in Preble's habitat. Surveys to determine whether Preble's is present will not be necessary. Also, in areas where Preble's are known to occur, modification in rodent control methodology will not be necessary. Overall, this exemption is considered to have only minor annual cost savings to landowners wishing to conduct rodent control. The primary benefit of the exemption is to assure landowners that they will be able to control house mice, rats, and other rodent pests around homes, barns, and other structures.

Impact to the Preble's from this exemption is also considered to be minimal. Preble's are not prone to occur within such structures, and, in most cases, such structures will be surrounded by little native shrub vegetation that would be utilized by the Preble's. Although on rare occasion a Preble's might be killed through rodent control in or around structures, this activity will have no impact to the species as a whole.

(2) Ongoing agricultural activities. This exemption applies to established, ongoing agricultural activities. Cultivated ground has not been shown to provide habitat for the Preble's, and continuation of existing row crop activities within cultivated areas is not believed to impact the Preble's. However, activities associated with hay production and grazing in the habitat occupied by Preble's may have some effect. The primary benefit of the rule to landowners and businesses is in providing assurances that they will be able to continue existing agricultural practices.

Row crops- The Preble's is not believed to occur within areas that are cultivated for row crops, and continuation of existing row crops will not affect the Preble's. Without the rule, landowners cultivating row crops within existing cultivated areas will not affect Preble's. With the rule, this situation wouldn't change; therefore, the rule would provide no economic benefit for producers of row crops. No take restrictions would apply to ongoing row crop

production; therefore, the rule provides no economic benefit for ongoing row crop production. This exemption provides assurances to producers that crop production activities can be continued without causing take of the Preble's.

Hay- Native grasses and alfalfa could be used to a limited degree by Preble's if the hay field is adjacent to or in suitable riparian habitat. Mowing of native hay or alfalfa may take Preble's if the Preble's occurs within the hayed area. Individual mice that occur in native riparian vegetation along streams are known to extend into adjacent uplands particularly where there is native grass and, therefore, may be taken by native grass haying operations. Such take may also occur in alfalfa. Therefore, without the rule, surveys might be required to document the Preble's presence or absence and assess the likelihood that take may occur. In many areas, presence or absence is already known, and no surveys would be necessary. Haying and other activities necessary to maintain hay fields that overlap into occupied habitat can occur without take of Preble's if modifications are made to timing of hay cutting and stubble height. As an alternative, occupied habitat can be left unmowed.

With the exemption provided by the rule, take that might occur from haying in these locations would not be prohibited. The costs of surveys and modifications of timing or harvest methods or leaving areas unmowed would not be incurred.

To assess the economic effect of this section, we assume a "worst case" scenario in which no hay harvest of the affected land would be permitted **without** the rule. In this case, the appropriate measure of economic effect for E.O. 12866 purposes is the **net** income landowners receive from harvesting hay. By permitting them to continue their current activities, the exemption provided by the rule results in a benefit to landowners equal to the net income they currently receive. To quantify that gain, we assume a competitive land rental market in which landowners are willing to pay annual rent per acre equal to the net income they would receive from farming that rented acre. In the long term, a farmer would be indifferent between farming the land or renting it to another at the market rental rate. Thus, rent per acre is used as a proxy measure for net income per acre, for which no data are available for the affected area and agricultural activities involved.

Table A shows total acres of hay and estimates of acres affected by the rule. Hay acreage includes both irrigated and unirrigated land. In both States, the large majority of hay, both alfalfa and native grasses, is grown on irrigated land.

Table B shows state-wide average rents in 1994 for the affected activities. More recent or disaggregated (e.g., county) data are not available.

Table C shows total net income gains to landowners who can harvest hay without section 9 restrictions, with the rule. The income estimates are based on the per-acre annual rent for irrigated land in the two States. The estimates represent upper bounds for two reasons. First, not all hay is grown on irrigated land, and the rent (i.e., income) per acre for non-irrigated land is substantially less. Second, if without the rule a landowner could not harvest hay, the land could still be grazed for a lesser net income per acre, but not zero.

Table A. Total Hay Acres and Acres Affected By Exemptions¹

State/County	Total Acres	Acres Affected by Exemptions	% Total Acres Affected
Wyoming			
Albany	95,000	646	1
Converse	35,000	9,450	27
Goshen	48,000	240	1
Laramie	60,000	33,600	56
Platte	43,000	8,643	20
State Total	281,000	52,579	19
Colorado			
Boulder	19,000	950	5
Douglas	14,500	750	5
Elbert	42,500	2,125	5
El Paso	20,000	400	2
Jefferson	3,000	150	5
Larimer	23,500	1,175	5
Weld	94,000	940	1
State Total	216,500	6,490	3
Total	497,500	59,069	12

¹1997 Census of Agriculture: U.S. Department of Agriculture 1998.

Table B. Average Cash Rental Per Acre² (\$ 1998)

State	Pasture	Non-irrigated Cropland	Irrigated Cropland
Wyoming	6.27 ¹	17.41	55.36
Colorado	12.43	31.14	81.63
Average	9.35	24.28	68.49

Table C. Annual Net Income Gains From Hay Production (\$ 1998)³

State	Net Income
Wyoming	2,911,000
Colorado	530,000
Total	3,441,000

Grazing- Grazing has occurred within the Preble's riparian habitat for many decades, and populations of the Preble's meadow jumping mouse still occur within some grazed areas adjacent to streams. Sites with grazing regimes that have allowed Preble's to still exist are the only sites where there is potential for take. While at least minimally supportive of Preble's, grazing still has some likelihood of taking mice at such sites. In areas where grazing is intensive, riparian habitat may be degraded, and take to the Preble's may occur. Intensive grazing during summer and early fall in grasslands in or adjacent to riparian habitat may reduce production of seeds used as food by the Preble's. We believe that take will not occur under grazing regimes where riparian habitat and grass seed production is maintained.

Without the rule, surveys might be required in a limited amount of unsurveyed potential habitat to document Preble's presence or absence. In areas where mice are known to occur, grazing regimes that maintain riparian habitat and adjacent grasslands are unlikely to result in take of the Preble's. Methods of preventing grazing impacts on riparian habitat may include (1) grazing in the riparian habitat in late fall or winter, (2) fencing livestock out of the riparian area, and (3) grazing at an intensity and duration that maintains the riparian habitat

²USDA National Agricultural Statistics Service, *Agricultural Land Values and Agricultural Cash Rents*. From <http://usda.mannlib.cornell.edu/usda>.

³1994 dollar values adjusted for inflation to 1998 dollars using the GNP deflator from U.S. Government Printing Office, *Economic Report of the President- 1999*

and grass seed production. Costs could be incurred by ranchers to fence or alter their grazing regime to prevent take of the Preble's. Most ranchers would need minimal or no modifications to maintain habitat and prevent take of the Preble's. Costs are believed to be minimal in most cases. Under this rule, take caused by ongoing grazing would be exempted, and these costs would not be incurred. While this rule will result in some cost savings, these will also be minimal.

In many locations, populations of the Preble's have been maintained with the existing grazing regime. While some take of the Preble's and possibly some limiting of local population size may be associated with continued grazing, and possibly some limiting of local population size, the overall effect to Preble's of ongoing grazing covered by this exemption is minimal.

- (3) Landscaping.** This exemption applies to activities undertaken to maintain existing landscaped areas. It does not extend to increasing landscaped areas, decreasing areas of native vegetation, or to increasing impervious surfaces (i.e., concrete pads, etc.) within existing landscaped areas.

Without the rule, some take could be associated with maintenance of existing landscaping; however, this amount of take will be minimal because the Preble's rarely uses landscaped areas. Most landscaping activities can be undertaken without take to the Preble's. In limited locations where there is a potential for impact to the Preble's from landscape activities, and where status of Preble's is unknown, surveys may be needed to determine presence or absence. In a few of these locations, alterations in landscaping plans or cessation of maintenance in or near Preble's habitat may be needed to avoid possible take. Generally, reduction in the level of landscape maintenance would reduce associated costs; however, in some instances modification of landscaping to avoid take could require additional costs.

With the rule, no alterations of existing landscape maintenance would be needed to avoid take. Since the mouse rarely uses landscaped areas, this exemption economically benefits only a few landowners within the Preble's range, and then only at a minimum level. The primary benefit of this exemption is to provide assurance to landowners that they can continue with existing landscape maintenance activities without fear of causing take to the Preble's.

Spraying of pesticides at existing golf courses and other landscaped areas adjacent to Preble's habitat could result in take of the Preble's. Appropriate pesticide application should prevent most of this take. Without a rule, alteration in pesticide application methods or possibly a reduction in pesticide use may be needed in limited locations along riparian corridors. This exemption precludes the need for such changes in pesticide use in these limited situations. The cost savings related to this exemption are believed to be minimal.

Without this exemption, certain roadside maintenance activities such as mowing or spraying adjacent to habitats occupied by the Preble's may result in take. To prevent take, modifications of maintenance methods may be needed. These could include altering the timing, frequency, or location of mowing or spraying operations. With the rule, such

alterations will not be needed to avoid take. This may preclude costs associated with altering maintenance methods, but cost savings from limited reductions in mowing and spraying will not occur. Effects of this rule are expected to be minimal because the Preble's will not typically occur in roadside areas that are undergoing active and regular maintenance.

- (4) Water rights.** This exemption applies to the diversion of water associated with existing water rights. In Colorado, these diversions are defined through decrees for absolute water rights granted by any of the Colorado water courts. In Wyoming, these diversions are defined through permits that have been awarded a final certificate of appropriation by the Office of the State Engineer. This exemption also includes maintenance of existing wells that provide sources for water right usage.

Impacts to streams and riparian habitats from diversion of water will vary depending upon amount and timing of diversions, stream geomorphology, precipitation, and other factors. Flows in some streams may be so significantly reduced from historic diversions that the riparian habitat has been reduced or eliminated. In these areas, the Preble's may no longer be present, and no take would occur from continuing such diversions. Flows in other streams may be only moderately or minimally reduced, and the riparian vegetation may be largely retained and Preble's may still be present. Flows in some streams may increase species habitat or actually create species habitat in areas where it would not have existed naturally. Continuing use of existing water rights on stream systems where the Preble's still exists may result in some limited take. Conversely, diversion of water from a stream may cause flooding of areas receiving the water. If these areas include habitat occupied by the Preble's, take could occur.

Without the rule, evaluation of the effects of diversions on occupied streams would be needed. This evaluation might require limited surveys in locations where Preble's presence is unknown. In areas where ongoing stream diversions are believed to be flooding habitat or reducing water flows within streams, some alterations in timing or quantity of diversion might be needed to prevent take.

The ability to divert water in Colorado and Wyoming is based on seniority of water right. The Colorado Division of Water Resources and the Wyoming State Engineers Office, respectively, are the two state entities that determine water allocation. In Colorado, within the areas where Preble's are found, or could be potentially found, there are 2-3,000 water rights holders. In Colorado, if water was needed for listed species, the effects of that allocation would be spread across all water rights holders. In Wyoming, there is no history of allocating water for listed species; however, water rights holders that would be affected by Preble's would be those conducting haying operations and they would be required to modify these operations to avoid take. The economic effects associated with these changes to planting and mowing hay have been discussed above; there would be no additional effect due to water rights issues. Therefore, this exemption would create no additional economic benefits.

Summary of Economic Effects

The analysis above examined each of the four exemptions of ESA section 9 take prohibitions that would be created by the proposed 4(d) rule. We determined that three of the exemptions would have little or no economic effect; i.e., would not ease any significant cost that would have been imposed by section 9, without the rule. They are:

- (1) **Rodent control.** This exemption would allow take of Preble's within 10 feet of a structure. Such an occurrence would be extremely rare. Therefore, costs of section 9 prohibitions that would be avoided by this provision of the rule would be insignificant.
- (2) **Landscaping.** This exemption would allow continuation of existing landscaping activities. Because Preble's rarely inhabit such areas, with the rule this exemption would create minimal benefits.
- (3) **Water diversions.** This exemption would allow diversion of water associated with existing water rights. The number of diversions that would need alteration without the rule is expected to be limited because the Preble's is not present in the vicinity of most streams. With the rule, such alterations would not be necessary, which could provide some small, economic benefit to landowners

Ongoing agricultural activities. This exemption **would not** have significant economic effects in regard to continuation of row crop production or grazing, where the rule would allow landowners to avoid the additional cost and loss of revenue caused by section 9 restrictions. However, this exemption **would** create significant benefits to landowners harvesting hay. Without the rule, section 9 would prevent all harvest of hay on the affected acres (i.e., the worst case), and landowners would receive no income from those lands. With the rule, harvest could continue without restrictions generating an estimated \$3,441,000 annual net income for the landowners, a beneficial effect of the rule.